

REMARKS

In the Final Office Action¹, the Examiner took the following actions:

- (a) objected to claims 13 and 14 as being “essentially duplicative”;
- (b) required a new title;
- (c) rejected claims 2, 3 and 9 under 35 U.S.C. § 112, first paragraph;
- (d) rejected claims 2 and 3 under 35 U.S.C. § 112, second paragraph and;
- (e) rejected claims 1-9, 13, and 14 under 35 U.S.C. § 103(a) as being unpatentable over either Horimai et al. (U.S. Patent 5,917,798) (“Horimai”), or alternatively WO99/44195 (via its U.S. equivalent, U.S. Patent No. 7,130,092) (“Horimai II”) in light of Moerner et al. (U.S. Patent 5,607,799) (“Moerner”).

Upon entry of the proposed claim amendments, claims 2, 4 and 5 are cancelled and claims 1, 3 and 6-14 will remain pending, with claims 10-12 withdrawn from consideration and claims 1, 3, 6-9, 13 and 14 under current examination.

Information Disclosure Statement

In the Final Office Action, the Examiner enclosed copies of signed PTO 1449 forms, dated May 9, 2007, for each of the documents indicated in the Information Disclosure Statements that Applicants filed on September 23, 2004 and October 7, 2004. In response to the Examiner’s inquiry, Applicants confirm that they desire to have the cited documents printed on the face of any patent that may issue from the present application.

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Objection to Claims 13 and 14

Applicants respectfully traverse the objection to claims 13 and 14. However, to advance prosecution, Applicants have amended claims 13 and 14. Claim 14 differs from claim 13 by, at least, additionally requiring that the recording medium includes a groove and reciting a different equation for the range of the optical density $S(z)$. Applicants therefore deem the Examiner's objection to claims 13 and 14 overcome, and request that the objection be withdrawn.

Objection to the Title

Applicants have amended the title in a manner consistent with the Examiner's comments at page 2 of the Final Office Action by including the word "holographic." Applicants deem this objection overcome and respectfully request that the Examiner withdraw the objection to the title of this application.

Rejections under 35 U.S.C. § 112, first paragraph

Applicants respectfully traverse the rejection of claims 2, 3 and 9 under 35 U.S.C. § 112, first paragraph.

The Examiner alleged that claims 2, 3 and 9 "contain[] subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) ... had possession of the claimed invention" (Final Office Action, page 2). Specifically, the Examiner alleged that previously added elements of claims 2, 3 and 9 "are not readily found/contained in the specification as originally filed" (Id. at 3).

In response, and without conceding to the Examiner's argument, Applicants propose cancelling claim 2 without prejudice or disclaimer, thereby rendering the

Examiner's rejection with respect to this claim moot. Applicants also propose amending claims 3 and 9. Support for the subject matter of claims 3 and 9 may be found in the specification at, for example, page 3, lines 20-28 , page 9, lines 9-16, page 13, lines 18-20, page 14, line 34 through page 15, line 11 and page 15, lines 1-8.

Thus, contrary to the Examiner's allegations, the originally filed specification clearly discloses the elements recited in amended claims 3 and 9. Applicants therefore respectfully request that the Examiner withdraw the rejection to claims 2, 3 and 9 under 35 U.S.C. § 112, first paragraph.

Rejection under 35 U.S.C. § 112, second paragraph

Applicants respectfully traverse the rejection of claims 2 and 3 under 35 U.S.C. § 112, second paragraph.

The Examiner contended that claims 2 and 3 are indefinite (Final Office Action, p. 3). Specifically, the Examiner contended that the claims "attempt to further define the optical density of the recording medium; however, how such limitations arise from the parent claim is not clear" (Id.).

As noted, Applicants propose cancelling claim 2 and amending claim 3. Upon entry of this amendment, Applicants deem the rejection of claim 3 under 35 U.S.C. § 112, second paragraph overcome. Applicants therefore request that the rejection of claims 2 and 3 be withdrawn.

Rejection Under 35 U.S.C. § 103(a)

Applicants request reconsideration and withdrawal of the rejection of claims 1-9, 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Horimai, Horimai II, and Moerner. A *prima facie* case of obviousness has not been established.

To establish a *prima facie* case of obviousness, the prior art references (separately or in combination) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). “[I]n formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” *USPTO Memorandum* from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, p. 2. “[T]he analysis supporting a rejection ... should be made explicit” and it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed.” *Id.* (citing *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007)).

A *prima facie* case of obviousness has not been established for at least the reason that the prior art, taken alone or in combination, fails to teach or suggest each and every element recited in claims 1-9, 13 and 14. Specifically, Horimai, Horimai II, and Moerner, taken alone or in combination, do not teach or suggest at least Applicants’ claimed “recording layer that contains regions of differing optical density” (claim 1, and similarly recited in claims 8, 9, 13 and 14).

Horimai appears to teach an optical information recording medium with a recording layer, a reflecting layer and radial addressing areas but does not teach or suggest differences in optical density within the recording layer. Horimai II appears to teach an optical recording medium with a recording layer wherein information is “recorded utilizing holography in the form of interference pattern as a result of interference between information light . . . and reference light,” (Horimai II, col. 66, line

67 and col. 67, lines 1-3). However, Horimai II does not teach or suggest differences in optical density within the recording layer. Moerner appears to teach a holographic storage device comprised of a three component optical photorefractive article, wherein recording involves the creation of internal electric fields that produce "local changes in the index of refraction" (Moerner, col. 1, lines 12-14). However, Moerner does not teach differences in optical density within the photorefractive article.

Therefore, a *prima facie* case of obviousness has not been established for at least the reason that the prior art, taken alone or in combination, fails to teach or suggest each and every element recited in claim 1. Claim 1 should therefore be allowable. Independent claims 8, 9, 13 and 14, although different in scope, recite similar limitations as claim 1, and should also be allowable for the same reasons as claim 1. In addition, claims 3-7 should also be allowable at least due to their dependence from base claim 1. Applicants therefore request reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection.

Applicants respectfully request that this Amendment after Final under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1, 3-9,13 and 14 in condition for allowance. As pointed out above, the amendments to the independent claims include subject matter presented in Applicants' specification. Therefore, the proposed amendments should not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner. Therefore, this Amendment after Final should allow for immediate and favorable action.

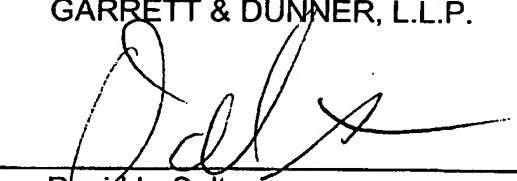
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: October 12, 2007

By: _____


David L. Soltz
Reg. No. 34,731